



**PATENT APPLICATION**  
**Attorney Dkt. No.: 7512.130**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

CHEN et al.

Application No.: 10/529,012

Group Art Unit: 1653

Filed: March 24, 2005

Examiner: Hamidinia, Shawn A.

For: POLYSACCHARIDE-BASED POLYMERS AND METHODS OF MAKING  
THE SAME

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicant hereby submits this Information Disclosure Statement under 37 C.F.R. §§  
1.56 and 1.97(c) to bring to the attention of the Examiner the document listed on the attached  
PTO Form 1449.

The Rule 17(p) official fee required by Rule 97(c) in lieu of certification is filed  
herewith. Should that fee be missing or inadequate, please charge the deficiency to our  
Deposit Account 50-0548.

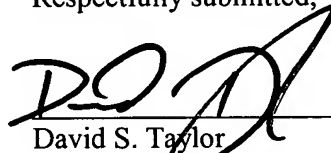
This submission does not represent that a search has been made or that no better art  
exists and does not constitute an admission that each or all of the listed documents are  
material or constitute "prior art." If it should be determined that any of the listed documents  
do not constitute "prior art" under United States law, Applicant reserves the right to present to  
the office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

This Information Disclosure Statement is intended to be in full compliance with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under Rule 97(f) to enable Applicant to comply fully.

Consideration of the foregoing plus return of a copy of the herewith Form PTO 1449 with the Examiner's initials in the left column per MPEP 609 are earnestly.

Respectfully submitted,

  
\_\_\_\_\_  
David S. Taylor  
Reg. No. 36,045

April 26, 2006

Date

BERENATO, WHITE & STAVISH, LLC  
6550 Rock Spring Drive, Suite 240  
Bethesda, Maryland 20817  
Telephone: (301) 896-0600  
Facsimile: (301) 896-0607



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		Application Number	10/529,012		
		Filing Date	March 24, 2005		
		First Named Inventor	Chen		
		Art Unit	1653		
		Examiner Name	Shawn Hamidinia		
Sheet		of		Attorney Docket Number	7512.130

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Sun et al., Tyrosinase-Containing Chitosan Gels: A Combined Catalyst and Sorbent for Selective Phenol Removal. Biotechnology and Bioengineering, Vol. 51, pp. 79-86 (1996)	
		Tatsumi, K. et al., Removal of Phenols from Wastewater by an Enzyme and Chitosan, Advances in Chitin Sciences, Vol. 2, pp. 864-869 (1997)	
		Muzzarelli, et al., Tyrosinase-mediated quinone tanning of chitinous materials, Carbohydrate Polymers, Vol. 24, pp. 295-300 (1994)	
		Wada et al., "Removal of Phenols and Aromatic Amines from Wastewater by a Combination ... a Coagulant," Biotechnology & Bioengineering, Vol. 45, pp. 304-309 (1995)	
		Payne et al., "Tyrosinase Reaction/Chitosan Adsorption for Selectively Removing Phenols from Aqueous Mixtures," Biotechnology & Bioengineering, 40, No. 9 (1992)	
		Seong, et al., "Fabrication of Microchambers Defined by Photopolymerized Hydrogels and Weirs...", Analytical Chemistry, Vol. 74, No. 14, pp. 3372-3377 (2002)	
		Gao, et al., "Lateral Patterning of CdTe Nanocrystal Films by the Electric Field Directed Layer-by-Layer Assembly Method," Langmuir, Vol. 18, pp. 4098-4102 (2002)	
		Chen et al., "pH-Sensitive Thin Hydrogel Microfabricated by Photolithography", Langmuir, Vol. 14, pp. 6610-6612 (1998)	
		Beebe, et al., "Functional Hydrogel Structures for Autonomous Flow Control Inside Microfluidic Channels," Nature, Vol. 404, pp. 588-590 (2000)	
		Sirkar et al., "Amperometric Biosensors Based on Oxidoreductases Immobilized in Photopolymerized ..." Analytic Chemistry, Vol. 70, No. 14, pp. 2888-2894 (1998)	

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		Li-Qun Wu, et al., "Chitosan-Mediated and Spatially Selective Electrodeposition of Nanoscale Particles," Langmuir, Vol. 21, No. 8, pp. 3641-3646, 2005	
		Li-Qun Wu, et al., Spatially Selective Deposition of a Reactive Polysaccharide Chitosan Layer onto a Patterned Template," Langmuir, Vol 19, No. 3, pp. 519-524 (2003)	
		Li-Qun Wu, et al., "Voltage-Dependent Assembly of the Polysaccharide Chitosan onto an Electrode Surface," Langmuir, Vol. 18, No. 22, pp. 8620-8625 (2002)	
		Tianhong Chen, et al., "Enzymatic Methods for in Situ Cell Entrapment and Cell Release," Biomacromolecules, Vol. 4, No. 6, pp. 1558-1563 (2003)	
		Mark J. Kastantin, et al., "Integrated Fabrication of Polymeric Devices for Biological Applications," Invited Paper, Journal of Sensors and Materials, pp. 1-18 (9/2003)	
		Tianhong Chen, et al., "Nature-Inspired Creation of Protein-Polysaccharide Conjugate and Its Subsequent ...Patterned Surface," Langmuir, Vol. 19, No. 22, pp. 9382-86 (2003)	
		Rohan Fernandes, et al., "Electrochemical Induced Deposition of a Polysaccharide Hydrogel onto a Patterned Surface," Langmuir, Vol. 19, No. 10, pp. 4058-62 (2003)	
		Hyunmin, Yi, et al., "A Robust Technique for Assembly of Nucleic Acid Hybridization .. Chitosan", Analytical Chemistry, Vol. 76, No. 2, pp. 365-372 (1/15/2004)	
		Rohan Fernandes, et al., "Thermo-Biolithography: A Technique for Patterning Nucleic Acids and Proteins," Langmuir, Vol. 20, No. 3, pp. 906-913 (2004)	
		Li-Qun Wu, et al. "Spatially-Selective Assembly of a Reactive Polysaccharide Layer onto Patterned Surfaces," PowerPoint Presentation given 11/8/2002 (22 slides)	

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		Takenaka, et al., Sol-gel Preparation of a Single Layer, 0.75 micron thick lead zirconate titanate films..., "Applied Physics Letters," Vol. 79, No. 21 pp. 3485-3487 (2001)	
		O'Connor, et al., "Immobilization of Neural Cells in Three-Dimensional Matrices for Biosensor Applications," Biosensors & Bioelectronics, Vol. 14, pp. 871-881 (2000)	
		Zhitomirsky, et al., "Cathodic Electrodeposition of Polymer Films and Organoceramic Films," Materials Science and Engineering, Vol. B78, pp. 125-130 (2000)	
		Chen, et al., "Self-Assembly of Monolayers of Cadmium Selenide Nanocrystals with Dual Color Emission," Langmuir, Vol. 15, pp. 6845-6850 (1999)	
		Clark, "Engineering the Microfabrication of Layer-by-Layer Thin Films," Advanced Materials (1998)	

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